

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CA2004/002156

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7): C12N-15/53, C12N-9/02, C12N-5/10, C12N-15/82, C12P-7/64, A01H-5/00, C07K-14/195, C12N-15/31

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC(7): C12N, C12P-7/64, A01H-5/00, C07K-14/195

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms used)

DELPHION, WEST, ESPACENET, AGRICOLA, CAPLUS, BIOSIS, REGISTRY; Keywords: (delta-9 or stearyl-ACP) desaturase, endoplasmic reticulum (retention), transgenic, prokaryotic

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No(s).
Y	US 5663068 A (RHONE-POULENC AGROCHIMIE (FR)) 2 September 1997 - example 6; cited in the description	1-33
Y	US 6043411 A (KIRIN BEER KABUSHIKI KAISHA (JP)) 28 March 2000 - the entire document, cited in the description	1-33
Y	US 20030054521 A1 (BOOTH et al (US)) 20 March 2003 - entire document, particularly paragraph [0069]	1-33
A	VINCENT, M.J. et al., Function of the KKXX motif in endoplasmic reticulum retrieval of a transmembrane protein depends on the length and structure of the cytoplasmic domain. J Biol Chem, 9 January, 1998, Vol. 273, No. 2, pages 950-956, ISSN: 0021-9258.	1-33

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent but published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

21 March 2005 (21-03-2005)

Date of mailing of the international search report

04 May 2005 (04-05-2005)

Name and mailing address of the ISA/CA
Canadian Intellectual Property Office
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Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:

a. type of material

☒ a sequence listing

☐ table(s) related to the sequence listing

b. format of material

☒ in written format

☒ in computer readable form

c. time of filing/furnishing

☒ contained in the international application as filed.

☒ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority for the purposes of search.

2. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

3. Additional comments :

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Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of the first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons :

1. ☐ Claim Nos. :
because they relate to subject matter not required to be searched by this Authority, namely :

2. ☒ Claim Nos. : 1-5, 7, 8 (partial)
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically :

Searches of these claims have been restricted to SEQ ID NO:2, modified by addition of any of the retention signals recited in claims 7 and 8, as the recitation of functional attributes alone for polypeptides and polynucleotides so claimed render it impossible to undertake a meaningful search over their entire scope .

3. ☐ Claim Nos. :
because they are dependant claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows :

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claim Nos. :

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claim Nos. :

Remark on Protest ☐ The additional search fees were accompanied by the applicant's protest.

☐ No protest accompanied the payment of additional search fees.

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Information on patent family members

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PCT/CA2004/002156

Patent document cited		Publication date	Patent family member(s)			Publication date
US 5663068	A	02-09-1997	AT	284961	E	15-01-2005
			AU	2881292	A1	03-05-1993
			AU	667848	B2	18-04-1996
			BG	0098695	A	31-05-1995
			BR	9206613	A	11-04-1995
			CN	1072722	A	02-06-1993
			CZ	9400817	A3	13-09-1995
			DE	69233459	C0	20-01-2005
			EP	666918	A1	16-08-1995
			HU	0069781	A2	28-09-1995
			IL	103407	A0	15-03-1993
			JP	03537434	T2	20-04-1995
			MX	9205820	A1	14-06-1993
			NZ	0244685	A	27-06-1994
			PH	0031293	A	06-07-1998
			RO	0113256	B1	29-05-1998
			RU	2152996	C2	20-07-2000
			WO	9306712	A1	15-04-1993
			ZA	9207777	A	21-04-1993
US 6043411	A	28-03-2000	AT	0273395	E	15-08-2004
			AU	1283795	A1	17-07-1995
			BR	9408435	A	05-08-1997
			CA	2180154	AA	06-07-1995
			CN	1142853	A	12-02-1997
			DE	69433941	C0	16-09-2004
			EP	736598	A1	09-10-1996
			FI	0962664	A	26-08-1996
			JP	03313724	B2	12-08-2002
			KR	0224120	B1	15-10-1999
			NO	0962727	A	27-08-1996
			NZ	277562	A	19-12-1997
			WO	9518222	A1	06-07-1995
US20030054521	A1	20-03-2003	AU	0186627	A5	04-03-2004
			BR	0113563	A	03-02-2004
			CA	2416602	AA	28-02-2002
			EP	1311659	A2	21-05-2003
			WO	0216565	A2	28-02-2002